

## Patent Claims

1. Method for maintaining a production installation having a plurality of field devices (F1, F2, F3), which partly, or all, are connected over a data bus D with a control system L, comprising the steps of:

a) electronically registering the field devices (F1, F2, F3) in a manufacturer database (HG-DB) with a manufacturer-specific identification and manufacturer-specific information relevant for the maintaining;

b) electronically registering the field devices in a customer database (IB-DB) with a customer-specific identification and customer-specific information; and

c) electronically querying the two databases (HG-DB and IB-HG) on the basis of maintenance criteria.

2. Method as claimed in claim 1, characterized in that the manufacturer-specific identification is the serial number of the field device (F1, F2, F3).

3. Method as claimed in one of the preceding claims, characterized in that the customer-specific identification is the tag number of the field device (F1, F2, F3).

4. Method as claimed in one of the preceding claims, characterized in that the maintenance criteria include corrective maintenance, replacement or preventive maintenance.

5. Method as claimed in one of the preceding claims, characterized in that the database querying yields a maintenance plan.

6. Method as claimed in claim 5, characterized in that the maintenance plan is stored in a maintenance database and every

separate point of the maintenance plan is confirmed or modified by the customer before the storing.

7. Method as claimed in one of the preceding claims, characterized in that the manufacturer database (HG-DB) also includes foreign devices of other manufacturers.

8. Method as claimed in claim 7, characterized in that the manufacturer database (HG-DB), or portions thereof, come from Internet databases.

9. Method as claimed in one of the preceding claims, characterized in that the time required for the maintenance of the field devices (F1, F2, F3) is stored in the manufacturer database (HG-DB) and from this information, combined with the maintenance plan, projected costs of maintenance work are calculated.

10. Method as claimed in one of the preceding claims, characterized in that already-experienced, actual expenses of the maintenance work for the field devices (F1, F2, F3) are stored in the customer database (IB-DB) and a projected versus actual cost comparison is produced for the maintenance plan.

11. Method as claimed in one of the preceding claims, characterized in that the manufacturer database (HG-DB) contains replacement part information and the database querying determines the optimal replacement part and consumable materials inventory for the chosen maintenance strategy.

12. Method as claimed in one of the preceding claims, characterized in that the customer database (IB-DB) is supplemented and modified by the operator itself of the production installation, via Internet access.

13. Method as claimed in claim 12, characterized in that the operator receives automatically and via Internet a maintenance

plan adapted to a changed inventory of field devices (F1, F2, F3) or changed requirements for the maintenance strategy.

14. Method as claimed in one of the preceding claims, characterized in that device type managers (DTMs) are stored in the manufacturer database (HG-DB) and are included in the maintenance plan in execution specifications intended for the maintenance personnel.

15. Method as claimed in claim 14, characterized in that electronic aids used for the maintenance are automatically adjusted by the maintenance plan.

16. Method as claimed in one of the preceding claims, characterized in that the maintenance plan represents the control file for asset management systems.

17. Method as claimed in claim 16, characterized in that, controlled by the device type managers (DTMs), control files for various asset management systems are produced.

18. Method as claimed in one of the preceding claims, characterized in that a plurality of manufacturers support manufacturer databases (HG-DB) in the Internet and, for each device in an installation, the appropriate link to the corresponding Internet address of the manufacturer database (HG-DB) is contained in the device type manager (DTM - e.g. FDT Tool) of the particular device.